REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application. Claims 1-38 are pending in this application.

Claim Amendments

Claims 1-3, 13, and 29 have been amended to improve their form and more distinctly and particularly point out the invention. Each of the amendments to claim 1-3, 13, and 29 are wholly a matter of form and do not in any way narrow the scope of the amended claims.

New claims 34-38 have been added as set forth above.

Rejection of the Claims

Claims 1-33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,884,323 to Hawkins (hereafter the "Hawkins reference" or "Hawkins") in view of U.S. Patent No. 5, 887,145 to Harari et al. (hereafter the "Harari reference" or "Harari").

Applicant respectfully disagrees with the rejection of claims 1-33 under 35 U.S.C. § 103(a), but nonetheless amends claims 1, 13, and 29 to improve their form and more distinctly and particularly point out the subject matter.

Applicant's Subject Matter

Applicant's subject matter is addressed to preventing the well-known problem of object deletion on a base computer during synchronization with another computer, such as a portable, in which the object to be synchronized has been temporarily removed from the portable computer. This happens, for example, when the object is stored on a memory card that is temporarily unavailable to the portable computer and the base computer *synchronizes its own version of the object with the absent version on the portable computer by deleting the version on the base computer.* Applicant's specification lays out the problem:

> "during each synchronization process, if an object has been deleted on the portable computer or the base computer since the last synchronization process, then the corresponding object on the other system is also deleted. Thus, *if a memory card containing a previously synchronized object is removed from the portable computer, then a synchronization process will delete the previously synchronized object from the base computer.* Typically, the user of the system did not intend for the objects on the memory card to be deleted from the base computer during a synchronization process. For example, the user may have temporarily removed the memory card to allow the insertion of a different memory card containing different objects or application programs" (page 3 of Applicant's specification, emphasis added).

Claim 1

Applicant's claim 1, as currently amended, recites:

1. (Currently Amended) A method of synchronizing objects in a first device and a second device having a plurality of storage volumes, wherein the second device occasionally deletes objects stored in one or more of the plurality of storage volumes during synchronization when the first device cannot access the one or more storage volumes, the method comprising:

identifying one or more storage volumes of the plurality of storage volumes as currently accessible to the first device; and

synchronizing only objects contained in the one or more identified storage volumes.

Claim 1 recites a method of identifying storage volumes containing objects that are currently accessible to a first device and synchronizing on a second device only objects contained in storage volumes that are currently accessible to the first device. This prevents the loss of an object on the second device during synchronization if the corresponding object on the first device is missing but not intended by the user to be deleted.

The Hawkins Reference in light of the Harari Reference

Neither the cited Hawkins reference or the cited Harari reference, either singly or in combination, address the problem (addressed by Applicant) of maintaining objects on a second device during synchronization processes wherein the second device occasionally deletes objects from itself that are not accessible to a first device.

Claim 1 is patentable over the cited references

Applicant's claims are nonobvious over Hawkins in light of Harari because Hawkins discloses a file synchronization scheme, but does not address synchronization when an object is not found on a device being synchronized with.

When the Hawkins SyncOpenDB( ) function is called (col. 9, line 58–col. 10, line 7) the Hawkins reference states "Upon successful return, the third parameter will contain a numeric file handle which should be used in all subsequent file operations." The Hawkins reference does not address in any way what happens if the HotSync® SyncOpenDB( ) function call is not successful. Typical occurrences following an unsuccessful SyncOpenDB( ) call, as suggested, for example, by examining embodiments of the HotSync® architecture at: http://www.palmos.com/dev/support/docs/recipes/recipe_syncmanagerapi.html include receiving an imperative "handle the error code" message or branching to an "if the database does not exist, create it" subroutine. Applicant's subject matter, on the other hand, prevents the situation of receiving the "handle the error code" message generated by an unsuccessful Hawkins SyncOpenDB( ) call. Moreover, Applicant's subject matter also prevents branching to an "if the database does not exist, create it" subroutine, which is a manifestation of the problem that Applicant's subject matter seeks to remedy: namely, an unwanted synchronization (by creating the missing database afresh) when the portable computer's version of the object being synchronized is missing. Implementation of the HotSync® "if the database does not exist, create it" response could create multiple versions of the same database on the portable computer if the memory card containing the missing database is plugged back in after a "if the database does not exist, create it" response has been implemented.

Applicant's subject matter is also nonobvious over Hawkins in light of Harari because even if, for the sake of argument, the Hawkins file synchronization method could do what Applicant's subject matter can do, the Hawkins method requires a communications link monitor program (col. 4, line 50-col. 5, line 8), a sync manager library (col. 5, lines 10-35), and a conduit library for each object to be synchronized (col. 5, lines 36-67). The sync manager library itself has subcategories of services including session oriented APIs, file oriented APIs, and record oriented APIs (col. 8, line 16-col. 15, line 28).

Applicant's method, on the other hand, requires only a desktop synchronization manager 116 in the second device and a portable synchronization manager 104 in the first device. The desktop synchronization manager 116 maintains a mapping table of all object identifiers. The mapping table also includes information regarding the volume identifier associated with the objects as well as information regarding whether the object has been changed or deleted since the last synchronization process. The portable synchronization manager 104 identifies volumes that are currently accessible to the first device.

Hence, even if the Hawkins method could do what Applicant's method can do, Applicant's method is implemented without a need for the sync manager library and conduit libraries of the Hawkins reference.

Office Action of November 7, 2002

The Office Action states in Section 7, that:

> "As to the step of while synchronizing, ignoring objects stored on volumes not currently accessible to the first device, a person of ordinary skill in the art at the time the invention was made would reasonably infer that the combination of Hawkins in view of Harari implicitly teaches this limitation. If the SyncOpen DB function call does not return successfully, the system cannot synchronize that particular database. If the database cannot be synchronized, the system must skip or ignore the database in the current round of synchronization" (Office Action, section 7).

Applicant respectfully disagrees with this characterization of what a person having ordinary skill in the art at the time the invention was made would reasonably infer as obvious—i.e., that "if the database cannot be synchronized, the system must skip or ignore the database in the current round of synchronization" (Office Action section 7). Applicant respectfully suggests that a person having ordinary skill in the art at the time the invention was made would make inferences in line with the actual practice in the art at the time the invention was made, namely, would infer that if an object is missing from a first device, the corresponding object on the second device would not be ignored for synchronization, but would be synchronized with the absent object on the first device by being deleted from the second device; or, the person of ordinary skill would infer that if the object is missing then the absence of the object is an error that must be handled; or, would infer that if the object is missing the synchronizing device must branch to an "if database does not exist, create it" function; etc. as possible responses to the absent object on the first device. Applicant's subject matter provides a nonobvious way to control synchronization when an intended object of synchronization is temporarily missing and the user does not intend for an automatic synchronization process to delete, supersede, and/or overwrite the temporarily missing object.

Accordingly, claim 1 is patentable of the Hawkins/Harari combination. Applicant respectfully requests that the §103 rejection of claim 1 be withdrawn.

Independent claims 13 and 29 are also amended to clarify that objects temporarily unavailable to a device being synchronized with are spared synchronization and do not result in error messages. For the reasons given above with respect to claim 1, the systems and methods recited in these claims are neither disclosed, taught, nor suggested by Hawkins and Harari, and the combination of Hawkins and Harari is not suggested by either Hawkins or Harari.

Independent claims 19 and 25 are left unchanged because they already distinctly claim and particularly point out that objects temporarily unavailable to a device being synchronized with are spared synchronization.

Dependent claims 2-12, 14-18, 20-24, 26-28, and 30-33 are allowable by virtue of their dependency on respective base claims 1, 13, 19, 25, 29.

New claims 34-38 are additional ways of distinctly claiming and particularly pointing out the subject matter of claims 1-33. No new matter has been added to the application by adding new claims 34-38.

CONCLUSION

Applicant respectfully suggests that claims 1-38 are in condition for allowance. Applicant respectfully requests reconsideration and issuance of the subject application. Should any matter in this case remain unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

Respectfully Submitted,

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